



ms1o3 M S Q T L L D S L N Q K E L T E . T S C T I . C D S R G Q . C D Q S T V E P L
ms1o1 M D A L L I P V T M E V P . . . C D S R G Q . .
ds1o1 M A S G L I D T N F S S T L A N G M S G C D Q S T V E P L

ms1o3 F G G I I I F R I . T I R Y I W T V C C H C G G K T K E
ms1o1 F G G I I I I R R T I R Y I W T V C C H C G G K T K E
ds1o1 L A G I L V V I L W R A F A F . . V S C R . . K E

ms1o3 H G V F R Q R U D M I L S A Q T V V G Q V I V I L V F V I L S V M I S A Q T I T G R V I V V L V F A L S V M I I S G Q T I I G R I I V V L V F I I

ms1o3 D I S D N A F F S F Y F G L R F W A A E D K I K F W L E M ms1o1 D M A F N V F F I L Y F G L R F I A A N D K L W F W L E V ds1o1 D L A F N I F F M V Y F F I R F I A A S D K L W F M L E M

ms1o3 R L I E L P K I L O V I K T S N S V K L S K L L S I ms1o1 R L I Q E I L Q F L N I L K T S N S I R L A Q L V S I ds1o1 R L M T V P D I L Q Y L N V L K T S S I R L A Q L V S I

FIG. 1A(1)



S W K Y V K G P R G L L E L F S S R R I E A N P L R . K I Y F 35
 A Q N T N N G S S Q A D G T L K P V D E K E E V V A A E V G W 93
 P D L G P N D P K Q K E Q . K A S R N K Q E F . L E G T E 107

S0
 S I G S L V I Y F I N . S M D P V R R C S . S Y E D K I V H G 141
 S I G A L V I Y F I D . S S N P I E S C Q N F Y K D F T L Q I 152
 S I A S L I I Y F V D A S S E E V E R C P I W S N N T T Q Q I 167

S1
 N S I V D I F T I P P T F I S Y Y L K S N W L G L R F L R A L 201
 N S V V D F F T V P P V F V S V Y L N R S W L G L R F L R A L 212
 Y S F V D Y F T I P P S F V S I Y L D R T W I G L R F L R A L 227

S3
 V I S T W F T A A G F L H L V E N S G D P W L N G R N S Q T M 261
 F I S T W L T A A G F I H L V E N S G D P W E N F Q N N Q A L 272
 F I S V W L T A A G I I H L L E N S G D P L D . F N N A H R L 286

S5

FIG. 1A(2)



ms1o3 S Y F E S I Y L V T A T M S T B G F G D V V A K T S L G R
ms1o1 T Y W E C V Y L L M V T M S T V G Y G D V Y A K T T L G R
ds1o1 S Y W T C V Y F K U V T M S T V G Y G D V Y C E T V L G R

P
ms1o3 T K P Y E A V K G K K F I V V C G N I T V D S S V T A F E L R
ms1o1 G G S Y S A V S G R K H I V V C G H I T L E S V S N E L K
ds1o1 G G T Y S K D P R K R H I V V C G H I T Y E E V S H F L K

ms1o3 C H T S C T N F V C G T A L K F E D L K R V A V E N S E A
ms1o1 R H F T Q V E F Y Q G S V L N P H D L A R V K I E S A D A
ds1o1 R H F T T V E F F Q G T I M N P I D I Q R V K V K E A D A

ms1o3 Q T R V I I Q I L Q S Q N K V F L S K I P N W D W S A G D
ms1o1 K I R I T Q M I Q Y H N K A H I I N I P S W N W K E G D
ds1o1 D I R V I I Q L M Q Y H N K A Y L L N I P S W D W K Q G D

ms1o3 E Q N . Q K V F P K H P W Q K H F L N G L K N K I L T Q R
ms1o1 M R S F I K I E E . D T W Q K Y Y L E G V S N E M Y T E Y
ds1o1 M R S F K T S P D M Q S W T N D Y L R G T G M E M Y T E T

ms1o3 P F F H S C . C T L I L N P S S Q V R L N K D T L G F F I
ms1o1 S A N R . E S R T L I N P G N H L K I Q E G T L G F F I
ds1o1 G A E E G A D S K T S I N P . R G A K I Q A N T Q G F F I

FIG. 1A(3)



I F I V F F T L G S L I L F A N Y I P E M V E L F S T R K K Y 321
 L F M V F F I L G G L A M F A S Y V P E I I E L I G N R K K Y 332
 T F L V F F L I V G L A V F A S W I P E I T E L A A Q R S K Y 346

S6

N F L H W K S G E I N I E I V E L G E T L P C L E L E T L L K 381
 D F L H K D R D V N V E I V E L H N I S P N I E L E A L F K 392
 D F L H E D D E D V D V E V V F L H R K P P D L E L E G L F K 406

C L I L A N H F C S D L H D E D N S N I M R V L S I K N Y Y P 441
 C L I L A N K Y C A D P D A E D A S N I M R V I S I K N Y H P 452
 C L V L A N K Y C Z D P D A E D A N I M R V I S I K N Y S D 446

N I L C F A E L K L G F I A Q G C L V P G L C T F L T T L F I 501
 D A T C L A E L K L G F I A Q S C L A Q G L S T M I A N I F S 512
 D V I C L A E L K L G F I A Q S C L A P G F S T M M A N L F A 526

S7

L S N D F V G M T F P Q V S R L C F V K L N L M L I A I Q H K 560
 L S S A F V G L S F P T V C E L C F V K L K L L M I A I E Y K 571
 L S P T F I G I P F A Q A T E L C R S K I K L L I L I A T E I K 586

S8

A D S S K A V K R A F F Y C S N C H S D V C N P E L I G K C N 619
 A S D A K E V K R A F F Y C K A C H D D V T D P K R I K K C G 629
 A Q S A D E V K R A W F Y C K A C H E D I K D E T L I K K C K 645

FIG. 1A(4)



ms103	C K	I K S R	Q Q L K A
ms101	C R R L I	E E D	P P T L S
ds101	C K N L I	E D	T N L I N
	V Q P R	D I T R D	
	S K E D D	R E D	
ms103	S	R E Q P	N
ms101	S P K	S L I T I T	
ds101	A G K	L I M R D P G N D Q I D	
	Q V N K V K	P T V N V S R Q V E G Q V I S P S Q Y N	

ms103	M	L	D	S	S	G	M	F	H	W	C	R	A	M	P	L	D	K	V	V	L				
ms101	.	N	M	D	S	N	V	K	K	Y	D	S	T	G	M	F	H	W	C	A	P	K	E	I	E	K	V	I	L
ds101	F	D	F	E	K	T	E	M	K	Y	D	S	T	G	M	F	H	W	S	P	A	K	S	Q	D	C	T	L	

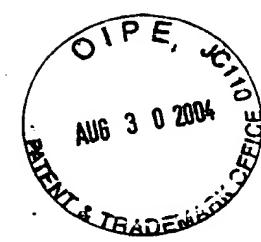
ms1o3	F V M P L R A S N Y T R Q E L K D I V F I G S L E Y F Q R
ms1o1	L V M P L R A S N F H Y H E L K H I V F V G S I E Y L K R
ds1o1	L V M P L R A S N F H Y H E L K H V I V G S V D Y I R R

ms103	C	S	M	C	V	I	I	A	T	P	Y	K	A	L	S	S	Q	I	I	V	D	T	E	A	I	M	A	T	I
ms101	C	D	M	C	V	I	I	S	A	N	Q	N	N	I	D	D	T	S	I	Q	D	K	E	C	I	L	A	S	I
ds101	C	D	M	C	C	T	T	S	A	K	V	P	S	N	D	D	P	T	T	A	D	K	F	A	I	L	A	S	I

ms103	P	S	S	A	F	D	S	K	E	R	K	Q	R	Y	K	.	.	Q	I	P	I	L	T	E	L	K	N	P
ms101	D	N	S	P	V	H	G	M	L	R	Q	P	S	I	T	T	G	V	N	I	P	I	T	E	L	V	N	D
ds101	A	G	S	P	I	.	V	I	Q	R	G	S	V	Y	G	A	N	V	P	M	I	T	E	L	V	N	D	

msl03 V F S D T F L D S L L A T S F Y N Y H V V E L L Q M L V T
msl01 A F A V S V L D S L M S A T Y F N D N I L T L I R T L V T

FIG. 1A(5)



P	T	I	M	V	M	K	S	S	L	T	D	F	T	T	S	S	N	I	H	A	S	M	S	T	E	I	H	T	C	F	661
P	K	K	Q	R	N	G	·	·	·	·	·	·	·	·	·	·	·	·	·	·	·	·	·	·	·	·	·	·	·	661	
R	N	V	R	R	P	N	G	T	G	N	G	T	G	G	M	H	H	M	N	S	T	R	A	A	A	A	A	A	705		
R	P	T	T	N	D	T	V	D	D	T	D	·	·	·	·	·	·	·	·	·	·	·	·	·	·	·	·	686			
R	P	T	S	R	S	S	G	T	G	T	Q	N	Q	N	G	G	V	S	L	P	A	G	I	A	D	D	Q	S	K	D	680

K	R	S	E	K	A	K	H	E	F	Q	N	H	I	V	V	C	V	F	G	D	A	Q	C	T	L	V	G	L	R	N	738
T	R	S	E	A	A	M	T	V	L	S	G	H	V	V	C	I	F	G	D	V	S	S	A	L	I	G	L	R	N	739	
D	R	N	Q	A	A	M	T	V	L	N	G	H	V	V	C	L	F	A	D	P	D	S	P	L	I	G	L	R	N	825	

E	W	R	F	L	R	N	F	P	K	I	H	I	M	P	G	S	A	L	Y	M	G	D	L	I	A	V	N	V	E	Q	789
E	W	E	T	L	H	N	F	P	K	V	S	I	L	P	G	T	P	L	S	R	A	D	L	R	A	V	N	I	N	L	799
E	W	K	M	L	Q	N	L	P	K	I	S	V	L	N	G	S	P	L	S	R	A	D	L	R	A	V	N	V	N	L	885

S9

N	I	Q	S	L	R	I	T	S	P	·	·	·	·	·	·	·	·	·	·	·	·	·	·	·	·	·	·	·	847		
N	I	K	S	M	Q	F	D	D	S	I	G	V	I	Q	A	N	S	Q	G	F	T	P	P	G	M	D	R	S	S	P	859
N	I	K	A	M	T	F	D	D	T	I	G	V	I	S	Q	R	G	P	E	E	D	·	·	·	N	L	S	A	T	941	
S	N	I	H	F	I	E	Q	M	G	G	L	D	G	M	I	K	G	T	S	L	H	L	S	T	S	T	G	A	904		
T	N	V	Q	F	L	D	Q	D	D	D	D	P	·	·	D	T	E	L	Y	L	T	Q	P	F	A	C	G	T	916		
G	N	V	Q	F	L	D	Q	D	D	D	D	P	·	·	D	T	E	L	Y	L	T	Q	P	F	A	C	G	T	996		

"Calcium Bowl"

G	G	I	S	S	E	M	E	H	Y	I	V	K	E	K	P	Y	K	T	T	D	D	Y	E	A	I	K	S	·	G	962
G	G	A	A	T	P	F	I	F	A	L	I	A	F	F	N	A	L	R	G	G	Y	S	T	P	Q	T	I	A	N	916

FIG. 1A(6)



ds1o1	A F A V S V L D S L M S T T Y F N Q N A L T L I R S L I T
ms1o3	R T R C K L G L L S I D Q T V L S G I N P R K T F G Q L F
ms1o1	R D R C R V A Q L A L L D G P F A D L G D G G C Y G D L F
ds1o1	R D R C R V G Q I S L Y D G P L A Q F G E C G K Y G D L F
ms1o3	F V I T R P S N E C H L L P S D L V F C A I P F N T T C G
ms1o1	Y V I T N P P Y E E E L V P T D L I F C I M Q F D H N A G
ds1o1	Y V I T N P P D D F S L L P T D Q V F V L M Q F D P G L
ms1o3	Q T R R R H W P R G R I S S I R T M P T S P T I F T Q S T
ms1o1	R I P N R P K S R E S R D K Q N A T R M T R M G Q A E
ds1o1	D N S U
ms1o3	T R U
ms1o1	Y K S T S S L I P P I R E V E D E C U

FIG. 1A(7)



GGATPELELILAEGLR . . GGYSTVESLSN 1054

C G S L D N F G I L C	V B L Y R M I D E E	E P S Q E H K R 1020
C K A L K T Y N M L C	F G I Y R L R D A H L S	T P S Q C T K R 1034
V A A L K S Y G M L C	I G L Y R F R D T S . S	S C D A S S K R 1113
K	S D S S P F N F R L K T T L	1064
Q S R A S L S H S S Q S S K K	K S S S V H S I P S T A N	1094
E Y K P P A V R A P A G G R G T N T Q G S G V G G G S N K D	G V G G G S N K D	1172
T R	E R G G L S T T T P E S I L W	1110
E K W F T D E P D N A Y P R N I Q I K P M S T M M A N Q I N Q	1151	1175
		1112
		1169

FIG. 1A(8)

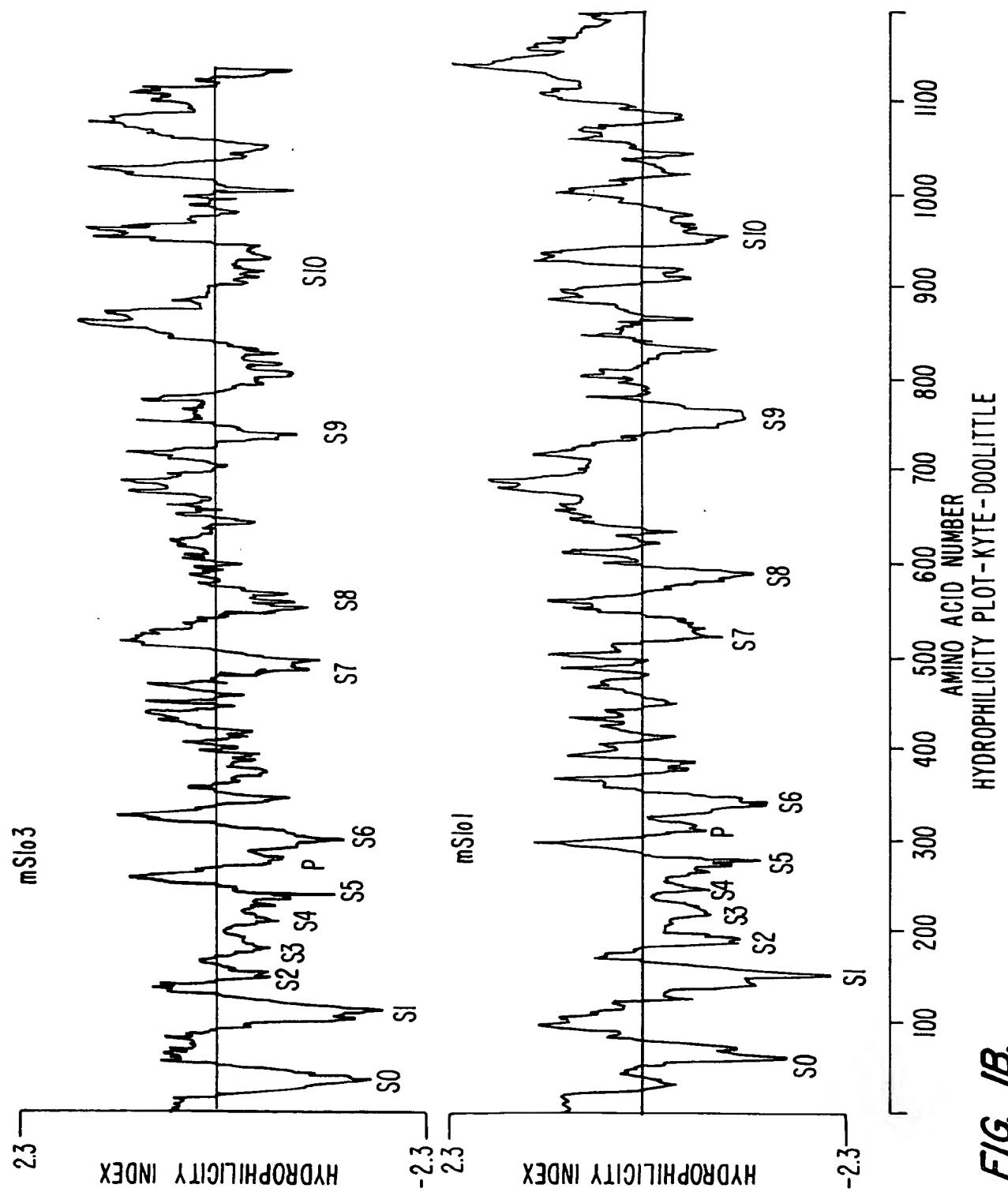




FIG. 2B.

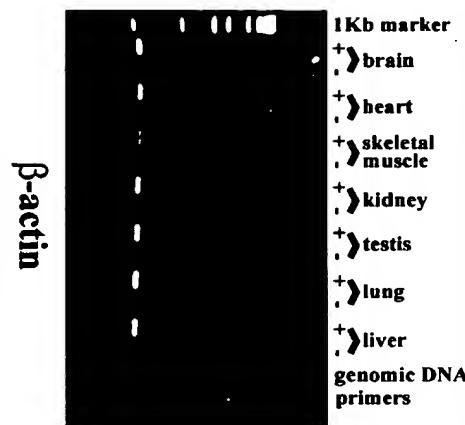


FIG. 2C.

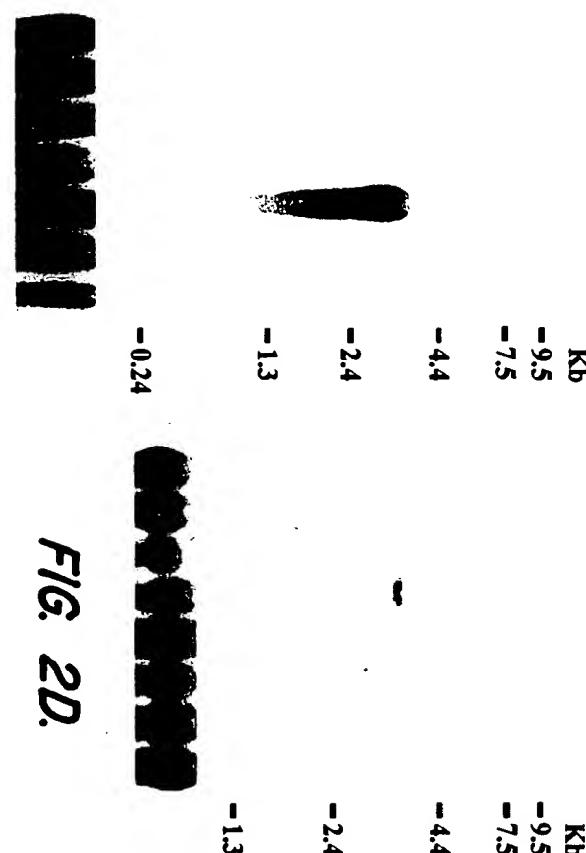


FIG. 2D.

BEST AVAILABLE COPY



FIG. 3A.

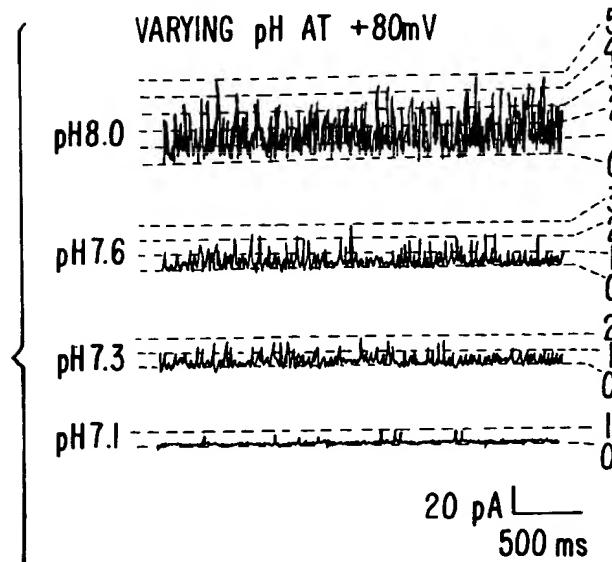
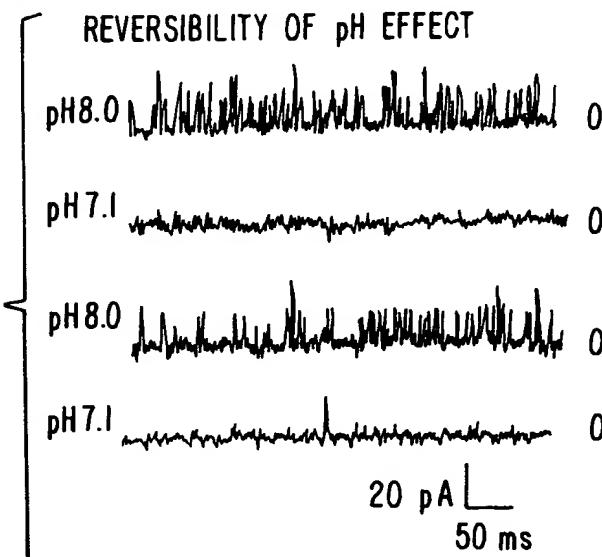


FIG. 3B.



BEST AVAILABLE COPY

FIG. 3C.

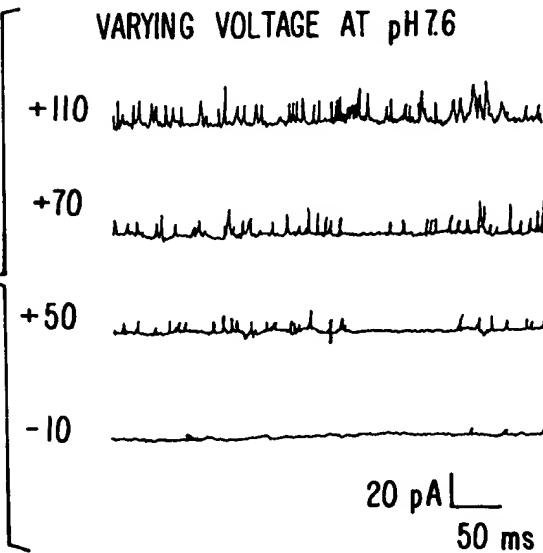




FIG. 3D.

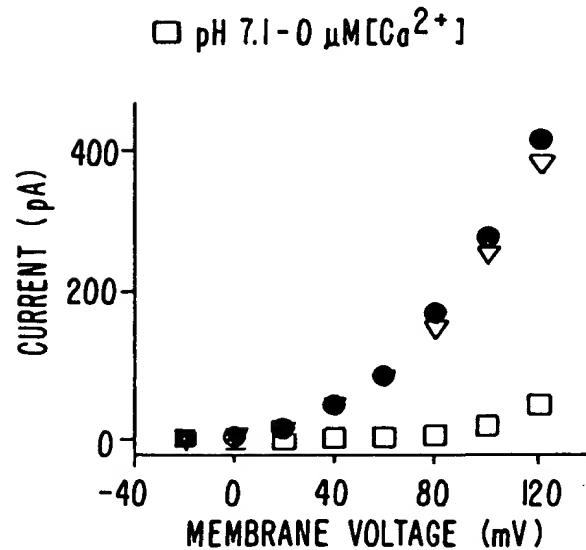
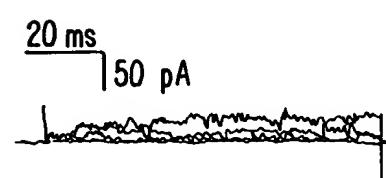
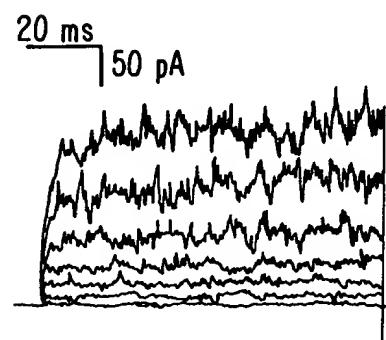
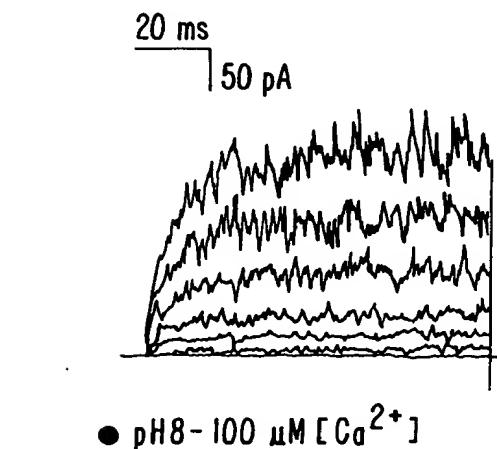




FIG. 4A.

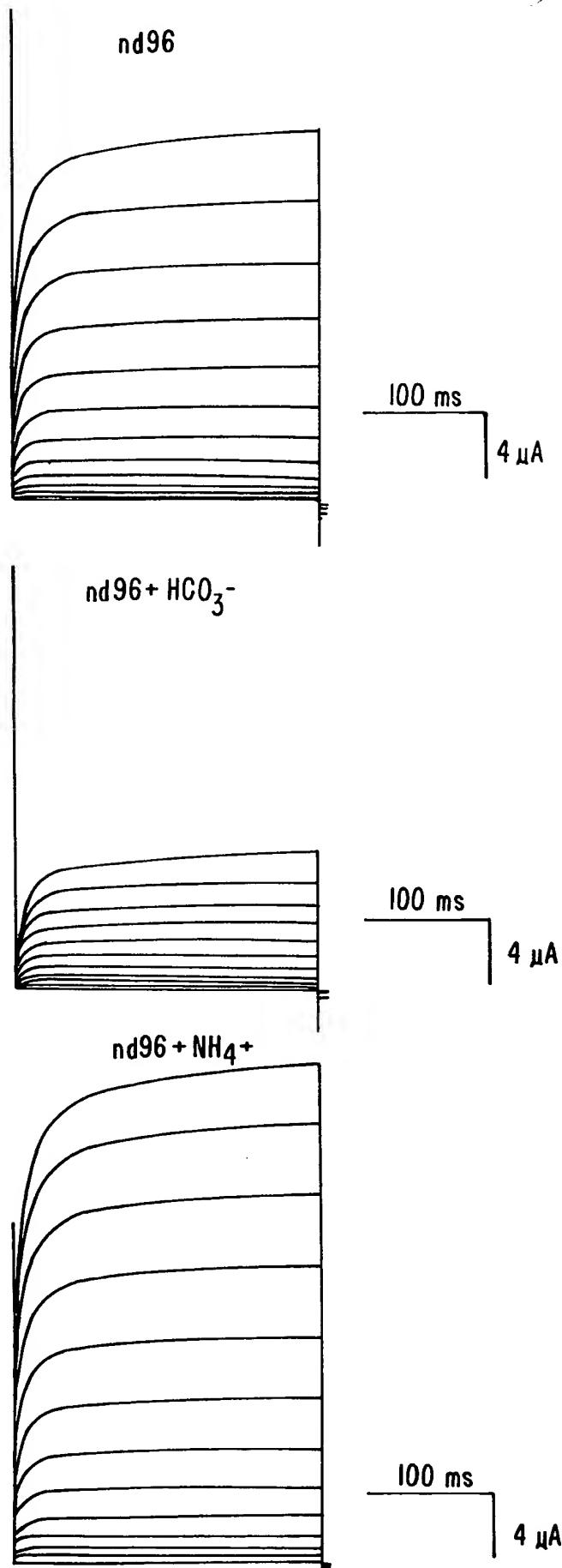




FIG. 4B.

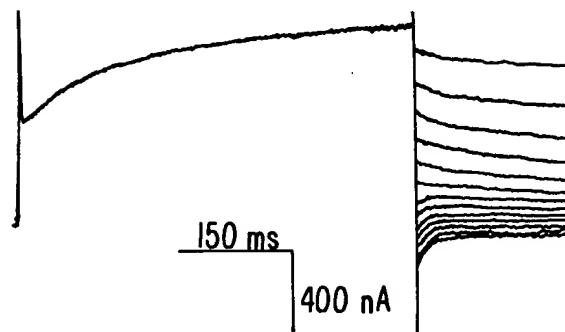


FIG. 4C.

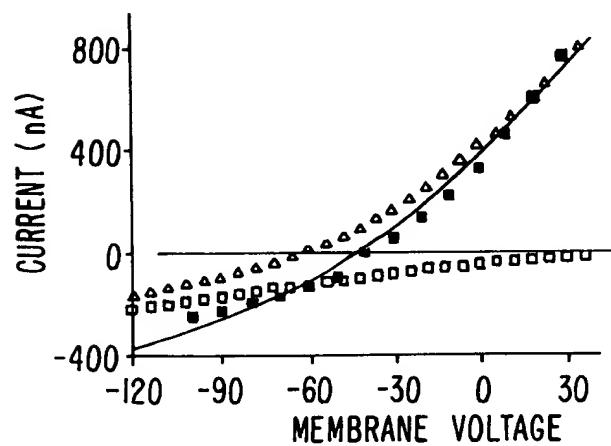
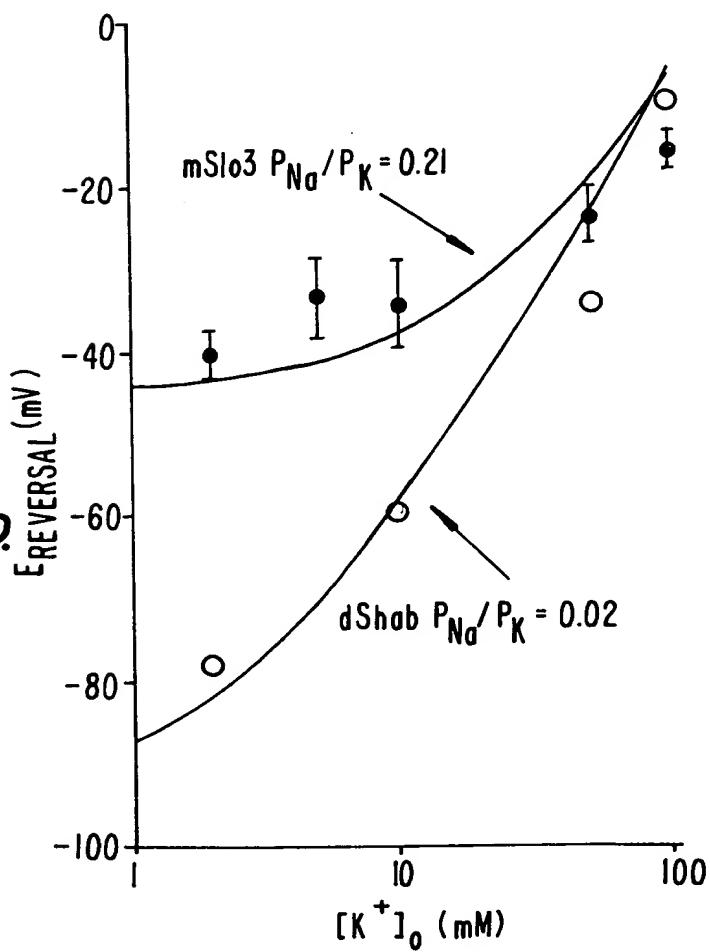


FIG. 4D.



BEST AVAILABLE COPY